

## II. INTRODUCTION TO THE FABRICATED METAL PRODUCTS INDUSTRY

This section provides background information on the size, geographic distribution, employment, production, sales, and economic condition of the Fabricated Metal Products industry. The types of facilities described within the document are also described in terms of their Standard Industrial Classification (SIC) codes. Additionally, this section contains a list of the largest companies in terms of sales.

### II.A. Introduction, Background, and Scope of the Notebook

The fabricated metal products industry comprises facilities that generally perform two functions: forming metal shapes and performing metal finishing operations, including surface preparation. The Standard Industrial Classification (SIC) code 34 is composed of establishments that fabricate ferrous and nonferrous metal products and those that perform electroplating, plating, polishing, anodizing, coloring, and coating operations on metals. Since the main processes associated with this industry can be divided into three types of operations (i.e., metal fabrication, metal preparation, and metal finishing), this profile is organized by the techniques that fall within these three groups.

### II.B. Characterization of the Fabricated Metal Products Industry

To provide a general understanding of this industry, information pertaining to the industry size and distribution, product characterization, and economic health and outlook is presented below. This information should provide a basic understanding of the facilities developing the products, the products themselves, and the economic condition of the industry.

#### II.B.1. Industry Size and Geographic Distribution

Variation in facility counts occur across data sources due to many factors, including reporting and definitional differences. This document does not attempt to reconcile these differences, but rather reports the data as they are maintained by each source.

The U.S. fabricated metal products industry comprises approximately 34,000 companies. Exhibit 1 lists the largest companies in selected metal fabricating industries. Companies are ranked by sales figures.

**Exhibit 1**  
**Metal Fabrication Companies**

Company	Sales (\$ Millions)	Number of Employees
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<i>SIC 3444 -- Sheet Metal Work</i>		
Stolle Corp., Sidney, OH	480	4,600
Alcan Alum. Corp., Warren, OH	120	1,200
Nytronics, Inc., Pitman, NJ	110	2,000
Hart and Cooley Inc., Holland, MI	100	1,200
Syro Steel Co., Girard, OH	100	400
Consolidated Systems, Inc., Columbia, SC	100	300
<i>SIC 3465 -- Automotive Stampings</i>		
Budd Co., Troy, MI	1,000	9,000
Douglas and Lomason Co., Farmington Hts., MI	391	5,800
Northern Engraving Corp., Sparta, WI	280	3,000
Randall Textron Inc., Cincinnati, OH	210	2,000
<i>SIC 3469 -- Metal Stampings</i>		
Hexcel Corp., Pleasanton, CA	386	2,900
JSJ Corp., Grand Haven, MI	260	2,500
Mirro-Foley Co., Manitowoc, WI	210	2,000
Tempel Steel Co., Niles, IL	210	1,100
<i>SIC 3499 -- Fabricated Metal Products</i>		
Steel Technologies, Louisville, KY	155	500
R.D. Werner Company, Inc., Greenville, PA	150	1,600
BW/IP Int., Inc., Seal Div., Long Beach, CA	104	400
LeFebure Corp., Cedar Rapids, IA	100	1,100
Dura Mech. Components, Inc., Troy, MI	100	1,000

Source: Fabricators & Manufacturers Association, Intl.

Exhibits 2 and 3 show the distribution of employees and the total shipments for the metal finishing industry. A typical "job shop" (i.e., small, independently owned metal finishing company) employs 15 to 20 people and generates \$800,000 to \$1 million in annual gross revenues.

### Exhibit 2 Number of Employees in Metal Finishing Industry

	1988	1989	1990	1991	1992
SIC 3471	76,300	76,600	73,200	66,600	65,400
SIC 3479	47,000	44,600	44,300	43,400	43,700
Total	123,300	121,200	117,500	110,000	109,100

Source: U.S. Department of Commerce, 1992 Census of Manufacturers.

**Exhibit 3**  
**Value of Shipments for Metal Finishing Establishments (\$ Millions)**

	1988	1989	1990	1991	1992
SIC 3471	4,324	4,452	4,513	4,124	4,726
SIC 3479	4,867	4,756	4,929	4,634	5,161
Total	9,191	9,208	9,442	8,758	9,887

*Source: U.S. Department of Commerce, 1992 Census of Manufacturers.*

Exhibits 4 and 5 list the largest companies in selected metal finishing industries. Companies are ranked by sales figures.

**Exhibit 4**  
**Inorganic Coating Job Shops**

Company	Sales (\$ Millions)	Number of Employees
Windsor Plastics, Evansville, IN	50	600
Crown City Plating, El Monte, CA	25	425
Pioneer Metal Finishing, Minneapolis, MN	20-30	380
Metal Surfaces, Bell Gardens, CA	15-25	310
Victory Finishing Technologies, Inc., Providence, RI	15-25	245
State Plating, Inc., Elwood, IN	15-20	400

*Source: "Large Plating Job Shops," Beverly A. Greaves, Products Finishing, April 1994.*

**Exhibit 5**  
**Organic Coating Job Shops**

Company	Sales (\$ Millions)	Number of Employees
Metokote Corp., Lima, OH	25+	800
The Crown Group, Warren, MI	25+	659
Industrial Powder Coatings, Inc., Norwalk, OH	25+	620
PreFinish Metals, Chicago, IL	25+	600
E/M Corp., West Lafayette, IN	15-25	300
Chicago Finished Metals, Bridgeview, IL	25+	250
Linetec Co., Wausau, WI	10-15	200
B.L. Downey Co., Inc., Broadview, IL	10-15	175

*Source: "Large Coating Job Shops," Beverly A. Greaves, Products Finishing, December 1994.*

Between 1982 and 1987, the total number of independent metal finishers employing less than 20 employees declined slightly, while those employing more than 20 employees increased by a corresponding amount. Exhibit 6 shows the number and percent of metal finishers of various sizes.

**Exhibit 6**  
**Metal Finishing Establishments, by Size**

1987			1992	
Establishments With and Average of :	Number of Companies	Percent Total	Number of Companies	Percent Total
1 to 9 Employees	2481	47.1	2553	48.7
10 to 49 Employees	2262	43.0	2186	41.7
50 to 99 Employees	365+	6.9	381	6.8
100 to 249 Employees	137	2.6	356	2.4
250 or more Employees	20	0.4	127	0.4
<b>Total</b>	<b>5265</b>	<b>100.0</b>	<b>5603</b>	<b>100.0</b>

*Source: Census of Manufacturers: 1992, U. S. Department of Commerce, Bureau of the Census.*

Although the metal finishing industry is geographically diverse, the industry is concentrated in what are usually considered the most heavily industrialized regions in the United States (See Exhibit 7). This geographic concentration occurs in part because it is cost-effective for small metal finishing facilities to be located near their customer base.

**Exhibit 7**  
**Geographic Distribution of Fabricated Metal Products Industry**

*Source: Census of Manufacturers: 1987.*

California has more establishments that produce metal-related products than any other State. California's establishments constitute 10.2 percent of the total establishments that produce fabricated structural metal (SIC\_3441). In addition, California leads in the number of establishments of other related industries: 15.6 percent of the sheet metal work establishments (SIC\_3444); 13 percent of the metal doors, sash, and trim establishments (SIC\_3442); and 13.7 percent of the architectural metal work establishments (SIC\_3446). California also has the majority of plating and polishing (SIC\_3471) and metal coating and allied services (SIC\_3479) establishments at 17.3 and 16.1 percent, respectively.

Michigan, Illinois, and Ohio have large numbers of various metal-related industries. Michigan has the largest number of companies in the screw machine products (SIC\_3451) and automotive stampings (SIC\_3465) industries, at 14 and 46.7 percent of the total companies in the United States, respectively. Illinois is home to 14.1 percent of companies that produce bolts, nuts, rivets, and washers (SIC 3452) and Ohio contains 12.6 percent of companies that produce iron and steel forgings (SIC\_3462).

Establishments engaged primarily in metal finishing tend to be small, independently